

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>X-16438</b>	<b>FOR FURTHER ACTION</b> <small>see Form PCT/ISA/220 as well as, where applicable, item 5 below.</small>	
International application No. <b>PCT/US2004/016623</b>	International filing date (day/month/year) <b>17/06/2004</b>	(Earliest) Priority Date (day/month/year) <b>29/03/2004</b>
Applicant  <b>ELI LILLY AND COMPANY</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 06 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☒ With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2. ☐ Certain claims were found unsearchable (See Box II).

3. ☐ Unity of invention is lacking (see Box III).

**4. With regard to the title,**

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

**5. With regard to the abstract,**

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

**6. With regards to the drawings,**

a. the figure of the drawings to be published with the abstract is Figure No. \_\_\_\_\_

☐ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

b. ☒ none of the figures is to be published with the abstract.

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2004/016623

## Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:
  - a. type of material
    - ☒ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material
    - ☒ in written format
    - ☒ in computer readable form
  - c. time of filing/furnishing
    - ☒ contained in the international application as filed
    - ☒ filed together with the international application in computer readable form
    - ☐ furnished subsequently to this Authority for the purpose of search
2. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished
3. Additional comments

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US2004/016623

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K38/12 A61P3/04

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K A61P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, EMBASE, BIOSIS, WPI Data, PASCAL

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
Y	<p>✓HASKELL-LUEVANO C ET AL: "Characterization of melanocortin NDP-MSH agonist peptide fragments at the mouse central and peripheral melanocortin receptors" JOURNAL OF MEDICINAL CHEMISTRY, AMERICAN CHEMICAL SOCIETY, WASHINGTON, US, vol. 44, no. 13, 2001, pages 2247-2252, XP002970859 ISSN: 0022-2623 the whole document</p> <p>----- -/--</p>	1-16

☒ Further documents are listed in the continuation of box C☒ Patent family members are listed in annex.

## \* Special categories of cited documents

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;" document member of the same patent family

Date of the actual completion of the international search

26 October 2004

Date of mailing of the international search report

10/11/2004

Name and mailing address of the ISA

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Fayos, C

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International Application No

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
Y	PROIETTO J ET AL: "NOVEL ANTI-OBESITY DRUGS" EXPERT OPINION ON INVESTIGATIONAL DRUGS, ASHLEY PUBLICATIONS LTD., LONDON, GB, vol. 9, no. 6, June 2000 (2000-06), pages 1317-1326, XP001004696 ISSN: 1354-3784	1-26
X	page 1321, column 2, paragraph 3.2 - page 1322, column 1, paragraph 3.2.3	1-4, 10-12
Y	✓ WO 00/33658 A (HOCHGESCHWENDER UTE ; BRENNAN MILES B (US); ELEANOR ROOSEVELT INST (US) 15 June 2000 (2000-06-15)	1-26
X	claims 1-124	1-4, 10-12
Y	✓ WO 03/006604 A (MERCK & CO INC ; BEDNAREK MARIA A (US)) 23 January 2003 (2003-01-23)	1-26
X	the whole document	1-4, 10-12
Y	✓ HOLDER JERRY RYAN ET AL: "Structure-activity relationships of the melanocortin tetrapeptide Ac-His-DPhe-Arg-Trp-NH <sub>2</sub> at the mouse melanocortin receptors. 1. Modifications at the His position" JOURNAL OF MEDICINAL CHEMISTRY, vol. 45, no. 13, 20 June 2002 (2002-06-20), pages 2801-2810, XP001183565 ISSN: 0022-2623 the whole document	1-26
Y	✓ CHEUNG ADRIAN WAI-HING ET AL: "Structure-activity relationship of linear peptide Bu-His-DPhe-Arg-Trp-Gly-NH <sub>2</sub> at the human melanocortin-1 and -4 receptors: Histidine substitution." BIOORGANIC AND MEDICINAL CHEMISTRY LETTERS, vol. 13, no. 1, 6 January 2003 (2003-01-06), pages 133-137, XP001183563 ISSN: 0960-894X	1-26
X	the whole document	1-4, 10-12
Y	✓ US 2002/143141 A1 (YAGALOFF KEITH ALAN ET AL) 3 October 2002 (2002-10-03)	1-26
X	the whole document	1-4, 10-12
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International Application No

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
Y	WO 00/58361 A (PROCTER & GAMBLE)	1-26
X	5 October 2000 (2000-10-05) claims 1-15	1-5, 10-13
Y	WO 99/54358 A (QUADRANT HOLDINGS CAMBRIDGE GISPEN WILLEM HENDRIK (NL); ADAM ROGER A) 28 October 1999 (1999-10-28)	1-26
X	the whole document	1-5, 10-13

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US2004/016623

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0033658	A	15-06-2000	US 6603058 B1	05-08-2003
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